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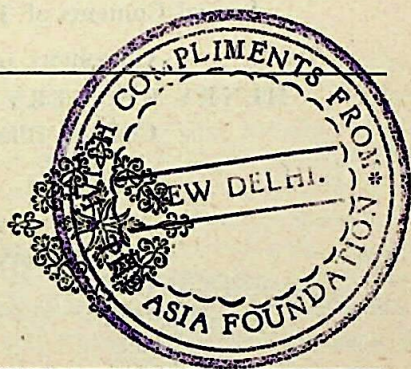
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THE GREAT BOOKS FOUNDATION
Chicago, Illinois

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THE METAPHYSICS OF ARISTOTLE

BOOK I

I

ALL MEN BY NATURE ARE ACTUATED WITH THE DESIRE OF knowledge, and an indication of this is the love of the senses; for even, irrespective of their utility, are they loved for their own sakes; and preeminently above the rest, the sense of sight. For not only for practical purposes, but also when not intent on doing anything, we choose the power of vision in preference, so to say, to all the rest of the senses. And a cause of this is the following—that this one of the senses, particularly enables us to apprehend whatever knowledge it is the inlet of, and that it makes many distinctive qualities manifest.

By nature then, indeed, are animals formed endowed with sense; but in some of them memory is not innate from sense, and in others it is. And for this reason are these possessed of more foresight, as well as a greater aptitude for discipline, than those which are wanting in this faculty of memory. Those furnished with foresight, indeed, are yet without the capability of receiving instruction, whatever amongst them are unable to understand the sounds they hear; as, for instance, bees, and other similar tribes of animals; but those are capable of receiving instruction as many as, in addition to memory, are provided with this sense also.

The rest, indeed, subsist then through impressions and the operations of memory, but share experience in a slight degree; whereas the human race exists by means of art also and the powers of reasoning.

Now, experience accrues to men from memory; for repeated acts of memory about the same thing done constitute the force of a single experience; and experience seems to be a thing almost similar to science and art.

But science and art result unto men by means of experience; for experience, indeed, as Polus saith, and correctly so, has produced art, but inexperience, chance. But an art comes into being when, out of many conceptions of experience, one universal opinion is evolved with respect to similar cases. For, indeed, to entertain the opinion that this particular remedy has been of service to Callias, while labouring under this particular disease, as well as to Socrates, and so individually to many, this is an inference of experience; but that it has been conducive to the health of all—such as have been defined according to one species—while labouring under this disease, as, for instance, to the phlegmatic, or the choleric, or those sick of a burning fever, this belongs to the province of art.

As regards, indeed, practical purposes, therefore, experience seems in no wise to differ from art; nay, even we see the experienced compassing their objects more effectually than those who possess a theory without the experience. But a cause of this is the following—that experience, indeed, is a knowledge of singulars, whereas art, of universals; but all things in the doing, and all generations, are concerned about the singular: for he whose profession it is to practise medicine, does not restore man to health save by accident, but Callias, or Socrates, or any of the rest so designated, to whom it happens to be a man. If, therefore, any one without the experience is furnished with the principle, and is acquainted with the universal, but is ignorant of the singular that is involved therein, he

will frequently fall into error in the case of his medical treatment; for that which is capable of cure is rather the singular.

But, nevertheless, we are of opinion that, at least, knowledge and understanding appertain to art rather than experience; and we reckon artists more wise than the experienced, inasmuch as wisdom is the concomitant of all philosophers rather in proportion to their knowledge.

But this is so because some, indeed, are aware of the cause, and some are not. For the experienced, indeed, know that a thing is so, but they do not know wherefore it is so; but others—I mean the scientific—are acquainted with the wherefore and the cause. Therefore, also, we reckon the chief artificers in each case to be entitled to more dignity, and to the reputation of superior knowledge, and to be more wise than the handicraftsmen, because the former are acquainted with the causes of the things that are being constructed; whereas the latter produce things, as certain inanimate things do, indeed; yet these perform their functions unconsciously—as the fire when it burns. Things indeed, therefore, that are inanimate, by a certain constitution of nature, perform each of these their functions, but the handicraftsmen through habit; inasmuch as it is not according as men are practical that they are more wise, but according as they possess the reason of a thing, and understand causes.

And, upon the whole, a proof of a person's having knowledge is even the ability to teach; and for this reason we consider art, rather than experience, to be a science; for artists can, whereas the handicraftsmen cannot, convey instruction.

And further, we regard none of the senses to be wisdom, although, at least, these are the most decisive sources of knowledge about singulars; but they make no affirmation of the wherefore in regard of anything—as, for example, why fire is hot, but only the fact that it is hot.

Therefore, indeed, is it natural for the person who first discovers any art whatsoever, beyond the ordinary power of the senses, to be the object of human admiration, not only on account of something of the things that have been discovered being useful, but as one that is wise and superior to the rest of men. But when more arts are being discovered—both some, indeed, in relation to things that are necessary, and others for pastime—we invariably regard such more wise than those, on account of their sciences not being for bare utility. Whence all things of such a sort having been already procured, those sciences have been invented which were pursued neither for purposes of pleasure nor necessity, and first in those places where the inhabitants enjoyed leisure: wherefore, in the neighbourhood of Egypt the mathematical arts were first established; for there leisure was spared unto the sacerdotal caste. It has then, indeed, been declared in the *Ethics* what is the difference between an art and a science, and the rest of the things of the same description.

But, at present, the reason of our producing this treatise is the fact, that all consider what is termed wisdom to be conversant about first causes and principles; so that—as has been said on a former occasion—the experienced seem to be more wise than those possessing any sense whatsoever, and the artificer than the experienced, and the master-artist than the handicraftsman, and the speculative rather than those that are productive. That, indeed, wisdom, therefore, is a science conversant about certain causes and first principles is obvious.

II

NOW, SINCE WE ARE ENGAGED IN INVESTIGATING THIS SCIENCE, the following must form a subject for our consideration; namely, about what kind of causes, and what kind

of first principles, is this science—I mean wisdom—conversant. If, doubtless, one would receive the opinions which we entertain concerning the wise man, perhaps from this our proposed inquiry would be evident the more.

Now, in the first place, indeed, we go on the supposition that the wise man, especially, is acquainted with all things scientifically, as far as this is possible, not, however, having a scientific knowledge of them singly. In the next place, a person who is capable of knowing things that are difficult, and not easy for a man to understand, such a one we deem wise (for perception by the senses is common to all, wherefore it is a thing that is easy, and by no means wise). Further, one who is more accurate, and more competent to give instruction in the causes of things, we regard more wise about every science. And of the sciences, also, that which is desirable for its own account, and for the sake of knowledge, we consider to be wisdom in preference to that which is eligible on account of its probable results, and that which is more qualified for preeminence we regard as wisdom, rather than that which is subordinate—for that the wise man ought not to be dictated to, but should dictate unto others; and that this person ought not to be swayed in his opinions by another, but one less wise by this man. Respecting this wisdom and wise men do we entertain such and so many suppositions.

But of these characteristics the scientific knowledge of all things must needs be found in him most especially who possesses the universal science; for this person, in a manner, knows all things that are subjects of it. But, also, the most difficult nearly for men to know are the things that are especially universal, for they are most remote from the senses. But the most accurate of the sciences are those respecting things that are primary, in the most eminent sense of the word; for those from fewer principles are more accurate than those said to be from addition, as arithmetic than geometry. But, also, that science, without

doubt, is more adapted towards giving instruction, at least, which speculates about causes; for those do afford instruction who assign the causes in regard of each individual thing. Now, understanding and scientific knowledge, for their own sakes, most especially reside in the science of that which is most particularly fitted for being scientifically known. For he who selects scientific knowledge, for its own sake, will especially choose that which is preeminently science; but such is that which is the science of that which is particularly fitting as an object of scientific knowledge, and particularly fitting as objects of scientific knowledge are first principles and causes; for on account of these, and by means of these, are the other objects of knowledge capable of being made known: but not these by means of those things that are subordinate to them. Most fit for preeminence likewise amongst the sciences, and fit for preeminence in preference to that which is subservient, is the science which communicates the knowledge of that on account of which each thing is to be done; but this constitutes the good in each particular, but, in general, that which is the best in every nature.

From all, therefore, that has been stated, the sought-for appellation lights upon the same science; for it is necessary that this be a science speculative of first principles and of causes, for the good, also, viewed as a final cause, is one from amongst our classified list of causes.

But that the science under investigation is not a science employed in producing, is evident from the case of those who formed systems of philosophy in the earliest ages. For from wonder men, both now and at the first, began to philosophize, having felt astonishment originally at the things which were more obvious, indeed, amongst those that were doubtful; then, by degrees, in this way having advanced onwards, and, in process of time, having started difficulties about more important subjects—as, for example, respecting the passive conditions of the moon, and those

brought to pass about the sun and stars, and respecting the generation of the universe. But he that labours under perplexity and wonder thinks that he is involved in ignorance. Therefore, also, the philosopher—that is, the lover of wisdom—is somehow a lover of fables, for the fable is made up of the things that are marvellous. Wherefore, if, for the avoidance of ignorance, men from time to time have been induced to form systems of philosophy, it is manifest that they went in pursuit of scientific knowledge for the sake of understanding it, and not on account of any utility that it might possess. But the event itself also bears witness to the truth of this statement; for on the supposition of almost all those things being in existence that are requisite towards both ease and the management of life, prudence of such a sort as this began to be in requisition. Therefore is it evident that we seek scientific knowledge from no other actual ground of utility save what springs from itself.

But as we say a free man exists who is such for his own sake, and not for the sake of another, so also, this alone of the sciences is free, for this alone subsists for its own sake.

Wherefore, also, the acquisition of this science may be justly regarded as not human, for, in many instances, human nature is servile.

So that, according to Simonides, the Deity only should enjoy this prerogative; yet that it is unworthy for a man not to investigate the knowledge that is in conformity with his own condition. But if, in reality, the poets make any such assertion, and if the Godhead is in its nature constituted so as to envy, in this respect it is especially natural that it should happen, and that all those that are over-subtle should be unfortunate: but neither does the Divine essence admit of being affected by envy, but—according to the proverb—the bards utter many falsehoods.

Nor ought we to consider any other science more en-

titled to honour than such as that under investigation at present. For that which is most divine is also most worthy of honour. But such will be so in only two ways; for that which the Deity would especially possess is a divine one amongst the sciences; and if there is any such science, this would be the case with the science of things divine. But this science, such as we have described it, alone is possessed of both of these characteristics; for to all speculators does the Deity appear as a cause, and a certain first principle; and such a science as this, either God alone, or he principally, would possess. Therefore, indeed, may all sciences else be more requisite than this one; but none is more excellent.

It is, indeed, necessary, in a manner, to establish the order of this science, in its development, in a direction contrary to the speculations that have been carried on from the beginning. For, indeed—as we have remarked—all men commence their inquiries from wonder whether a thing be so—as in the case of the spontaneous movements of jugglers' figures to those who have not as yet speculated into their cause; or respecting the solstices, or the incommensurability of the diameter; for it seems to be a thing astonishing to all, if any quantity of those that are the smallest is not capable of being measured. But it is necessary to draw our inquiry to a close in a direction the contrary to this, and towards what is better, according to the proverb. As also happens in the case of these, when they succeed in learning those points; for nothing would a geometrician so wonder at, as if the diameter of a square should be commensurable with its side. What, therefore, is the nature of the science under investigation has been declared; as, also, what the aim should be which the present inquiry and the entire treatise should strive and attain.

BOOK IV

I

THERE IS A CERTAIN SCIENCE WHICH MAKES, AS THE OBJECT of its speculation, entity, as far forth as it is entity, and the things which are essentially inherent in this. But this is the same with none of those which are called particular sciences; for none of the rest of the sciences examines universally concerning entity so far forth as it is entity: but, cutting away a certain portion of it, they investigate what is accidental in regard of this; as, for example, the mathematical sciences. But, whereas we are in search of first principles and the topmost causes, it is evident that they must needs be absolutely of a certain nature. If, therefore, they, also, who investigate the elements of entities were accustomed to investigate these first principles, it is necessary, likewise, that the elements of entity should not have a subsistence according to accident, but so far forth as they are entities. Wherefore, also, must we ascertain the first causes of entity, so far as it is entity.

II

NOW, ENTITY IS SPOKEN OF IN VARIOUS SENSES, INDEED, BUT in reference to one, and to one certain nature, and not equivocally; but, in like manner, also, as everything conducive to health is termed so in reference to health, partly, indeed, in its preserving that state, and partly in giving rise to it, and partly in being an indication of health, and partly in being receptive of it; and, in like manner, as the medicinal is styled so in reference to the art of medicine; for, indeed, a thing is called medicinal partly in reference to its possess-

ing the medicinal power, partly in its being by nature adapted for the possession of such, and partly in its being the work of the medicinal art: and we shall receive the predication of other things in a similar manner with these. Thus, however, is entity, also, spoken of in various ways indeed; but every entity in reference to one first cause: for some things, because they are substances, are styled entities; but others, because they are affections of substance; but others, because they are a way to substance, either as corruptions, or privations, or qualities, or things formative or generative, of substance, or of those which are spoken of in reference to substance, or the negations of any of these or of substance. Wherefore, also, the non-entity we pronounce to be non-entity.

As, then, there is one science of all things pertaining to health, in like manner, also, is this so in the case of other things. For it is the province of one science to speculate concerning not only those things spoken of according to one, but also those spoken of in reference to a single nature. For these, also, in a certain manner, are spoken of in accordance with one. It is evident, therefore, that it is the province of a single science to speculate concerning entities, so far forth as they are entities. But in every respect is the science of ontology strictly a science of that which is first or elemental, both on which the other things depend and through which they are denominated. If, then, this is substance, the Philosopher or Metaphysician must needs be in possession of the first principles and causes of substances. Now, of every genus there is both one sense of each and one science; as, for instance, grammatical science is one, and speculates into all vocal sounds. Wherefore, to speculate into, also, the number of the species of entity, and the species of the species, belongs to a science one in kind.

If, therefore, entity and unity are the same thing, and one nature, from the fact of their following each other as

first principle and cause, yet they are not manifested by a single definition; there is, however, no difference, should we even make our suppositions in regard of them after a similar manner, nay, even rather is it for the advantage of the present inquiry. For it is the same thing, one man and the entity man and man; and not anything different does it make manifest, according to a repetition of the expression, to say man is, and man and one man: but it is evident that there is no separation of being either in the case of production or corruption. But in like manner, also, is it the case with unity. Wherefore, it is manifest that addition in these implies the same thing, and that nothing different is unity from entity. And, further, the substance of each thing is one not according to accident; and in like manner, also, is it the case with any entity whatsoever. Therefore, as numerous as are the species of unity, so numerous, also, are those of entity, into the nature of which it is the province of the same science in kind to investigate: now I speak, for instance, of sameness and similarity, and of the other things of this sort, and of those that are in opposition to these. And almost all contraries are reduced to this first principle. These points, however, have formed the subject-matter of our inquiries in our treatise styled, "A Selection of Contraries."

And so many portions of philosophy are there as there are, at least, substances. Wherefore, is it necessary that there should be a certain first philosophy, and one next in order belonging to these; for unity and entity are things straightway involving genera; wherefore, also, the sciences will follow upon these. For the Philosopher or Metaphysician is as one that is styled a Mathematician, for his science also has parts; and there is a certain first and second science, and another next in order, in mathematics. But whereas it is the province of one science to investigate things that are in opposition, and since plurality is opposed to unity, it is also the province of one science to speculate

into negation and privation, on account of both kinds of inquiry being possible in the case of unity, of which there is the negation or the privation, either absolutely affirmed that such does not reside therein, or in a certain genus thereof. In this case, indeed, therefore, the difference is present in unity with the exception of that which is inherent in negation, (for negation is the absence of that.) And in privation, also, is there a certain subject nature of which the privation is predicated. Now, plurality is opposed to unity; wherefore, also, the things that are in opposition to those that have been mentioned—namely, both diversity, and dissimilarity, and inequality, and as many other qualities as are denominated either according to the same, or according to plurality and unity—it is the province of the science of metaphysics that we have alluded to, to examine into; among the number of which, also, a certain one is contrariety; for contrariety is a certain difference, but difference is diversity.

Wherefore, since unity is spoken of in various ways, these, also, shall in many ways be spoken of; but, nevertheless, it is the province of one science to make known all such; for even though unity be spoken of in many ways, on that account it is not the province of a different science to investigate them: if, however, neither the definitions are capable of being reduced in accordance with one, nor in reference to one, then is it the province of a different science. But since all such are referred to what is first—as, for example; as many things as are styled one are spoken of in reference to the first one—in the same manner may the assertion be made, that this science is concerning sameness and diversity, and the rest of the contraries. Wherefore, in dividing how many modes each is expressed by, in this way must reference be made to what is first or original in each category, in order to ascertain how it is expressed in reference to that. For things will be denominated partly by

reason of having those primaries, and partly that they are causes of them, and partly according to other such modes. Therefore, is it evident, as has been stated in the doubts, that it is the province of one science to institute an inquiry concerning these and concerning substance. But this was one of those inquiries that have been mentioned in the doubts.

And it is the part of the philosopher to be able to speculate about all the foregoing subjects of inquiry. For, if it be not the province of the philosopher, who shall there be that will be likely to examine whether he be the same person, Socrates, and Socrates sitting; or whether one be contrary to one, or what a contrary is, or in how many ways it is denominated? In like manner, also, is it in the case of the rest of such points for investigation. Since, therefore, these of themselves are affections of unity, so far forth as it is unity, and of entity, so far forth as it is entity, but not so far forth as they are numbers, or lines, or fire, it is evident that it is the province of that science of ontology to make known both what these are, and the accidents that are inherent in them. And not in this respect do they err who examine concerning these, as not philosophising, but because substance, about which they understand nothing, is a thing prior in existence. Since, as there are peculiar affections of number, as far as it is number, (for instance, oddness, evenness, commensurability, equality, excess, defect,) and as these both absolutely and relatively to one another are inherent in numbers, and since in a similar way there are other peculiar qualities, in what is solid and incapable of motion, and in what is being moved, both that which is without weight, and that which has weight, so, also, in entity, so far forth as it is entity, are there certain peculiar properties; and these are they about the truth of which it is the province of the philosopher or ontologist to inquire.

Now, a proof of this is the following: for dialecticians and

sophists assume, indeed, the same figure as the philosopher (for sophistical is only apparent wisdom, and dialecticians dispute about all things); to all, however, is entity common. But they dispute concerning these, evidently, from the cause of these being proper subjects of inquiry for philosophy. For, indeed, sophistry and dialectics are employed about the same genus as philosophy is; but philosophy differs from the one in the mode of power, and from the other in the choice of life. And again, dialectic science is merely tentative of the knowledge of those things that philosophy has already actually reached; but sophistic science is only apparent, and not real. And the same is further proved from the fact that a different co-ordination of contraries is privation, and all things are referred to entity and nonentity, and to unity and plurality: as, for instance, rest in its nature partakes of unity, and motion of plurality. But that entities and substance are compounded of contraries almost all men acknowledge—all, at least, assert the first principles to be contraries: according to some, indeed, these principles being odd and even; and according to others, hot and cold; and according to others, finite and infinite; and others, harmony and discord. But all the rest of such are referred apparently to unity and plurality; for let this reduction be received by us as is done in the first book of our work "Concerning the Good." Now, there it appears that first principles, both altogether and as is acknowledged by others, fall under these genera.

From these statements, therefore, is it also evident that to investigate entity, so far forth as it is entity, is the province of one science. For all things are either contraries or composed from contraries: but the first principles, also, of contraries are unity and plurality; and these are belonging to the department of one science, whether the predication be made according to one or not, as, perhaps, the truth is. But, nevertheless, even though unity be spoken of in many

ways, to the first will the rest be reduced, and the contraries in like manner. And for this reason, even though entity and unity be not universal and the same, in the case of all things, or separable, as, perhaps, they are not, yet some things, no doubt, are referred to unity, but others to that next in order; and for this reason it is not the business of the geometer to investigate into what the contrary is, or the perfect, or unity, or entity, or identity, or diversity, save only from hypothesis.

That, therefore, it is the province of one science to investigate entity, so far forth as it is entity, and the things therein existing, so far forth as they constitute entity, is evident; and that the same science is speculative not only of substances, but also of things that are inherent in substances, and of the particulars enumerated, both concerning priority and subsequence, and genus and species, and whole and part, and the rest of each, this is evident also.

III

BUT WE MUST DETERMINE WHETHER IT IS THE PROVINCE OF one science, or a different one, to speculate concerning axioms, as they are called, in mathematics; and concerning substance? Doubtless, it is manifest that it is belonging to one, and that the science of the philosopher, and the investigation of such inquirer is respecting these; for in all entities are they inherent, but not in any genus separate distinctly from the rest. And all investigators employ them, indeed, because they belong to entity, so far forth as it is entity; each genus, however, constitutes entity. And thus far do they employ them as is sufficient for their purpose, but that is as far as they comprise the genus about which they bring forward their demonstrations. Wherefore, since it is evident that they are inherent in all things, as far as they are entities, (for this is held by these in common), the speculation of

them belongs to the philosopher, whose business it is to make known the truth concerning entity, so far forth as it is entity, and concerning these. Therefore, no one of those who are partial inquirers attempts to say aught concerning these, whether they are true or not, neither, for instance, the geometer nor the arithmetician.

Some of the natural philosophers, however, in doing so, act reasonably; for they alone are accustomed to think that it is their province to examine concerning the whole of nature, and concerning entity. But since there is something of a higher order than the physical (for nature is merely one certain genus of entity), the investigation in regard of these should belong to the universal, and to that which is speculative of the first substance. Now, I admit there is a certain wisdom, namely, even the physical; but it is not the first. As many things, however, as certain of those who speak concerning the truth of axioms attempt to lay down, in what way they ought to be admitted, they do this from ignorance of analytics; for they ought to approach such a subject who are instructed therein beforehand: but whilst hearers they should not be investigators. That, therefore, it is the part of the philosopher, and of the inquirer concerning substance in its entirety, so far forth as it is such by nature, to examine, also, in regard of syllogistic principles, is evident.

But it is becoming that one especially furnishing information about each genus should be competent to speak of the very surest principles of the thing; and, therefore, the same holds true of a person that is engaged in the investigation of entities, so far forth as they are entities—I mean, that he should be able to adduce the most firm principles of all. Now, this is the philosopher; and the most firm first principle of all is that concerning which there can be no possibility of deception, for such must needs be that which is most known, for those points respecting which men do not impart knowledge are all exposed to deception in; and it

must needs, likewise, be a thing independent of hypothesis. For a principle which one must be in possession of who understands any entity whatsoever, this is not an hypothesis; but what one must make known, in the manifestation of anything whatsoever, he must also needs come forward furnished with this. That, therefore, indeed, such is the most firm first principle of all is evident. Now, what this principle is we shall after this declare. For the same thing to be present and not be present at the same time in the same subject, and according to the same, is impossible (and whatsoever things we have further defined, let these be so defined in respect of their logical difficulties). This, however, is the most firm of all first principles; for it involves the distinction spoken of above. For it is impossible to suppose that anything whatsoever is the same, and is not the same, as certain ones think that Heraclitus asserts; for it is not necessary, as far as concerns what one asserts to exist, to suppose that these also do exist. But if it is not admissible that contraries at the same time should subsist in the same subject (now the usual definitions have been additionally made by us to this proposition), and if an opinion contrary to an opinion be that of contradiction, it is evident that it is impossible for the same inquirer to suppose that at the same time the same thing should be and not be; for one labouring under deception in regard of this would entertain contrary opinions at the same time. Wherefore, all who employ demonstration reduce the matter to this last opinion; for by nature this, also, is the first principle of all the rest of the axioms.

IV

NOW, THERE ARE CERTAIN PHILOSOPHERS WHO, AS WE HAVE intimated, themselves both affirm that it is possible that the same thing may and may not be, and that they really think

so. This principle, however, do many of the investigators of Nature employ. But we just now have assumed it as a thing impossible, in the case of an entity, that it should be and not be at the same time; and by means of this have we demonstrated that this is the most firm of all first principles. Now, some also demand a demonstration of this, from ignorance; for it is ignorance the not knowing what things one ought to seek a demonstration of, and of what things he ought not. For, indeed, upon the whole, it is impossible that there should be a demonstration of all things; for one would go on in this case to infinity, so that there would not be any demonstration at all in this way. If, however, there be some things of which we should not seek a demonstration, what they in preference require such a first principle to be they have not the ability to affirm. But it is possible to demonstrate concerning this, by refutation, that it is impossible, if only he would affirm anything who doubts; but if he makes no assertion, it would be ridiculous the seeking an argument against him who had not a reason to put forward about anything, so far as he had no such reason; for an adversary of this sort, as far now as he is such, would be like unto a plant. Now, I say, demonstration by refutation differs from demonstration simply or properly so called, because he that employs demonstration would seem to require what is the principle in the beginning; but, on the supposition of the existence of another cause of such a kind, it would be a refutation, and not a demonstration.

Now, a commencement of a discussion in regard of all such points is, not the demanding the declaration that either a thing exists or doth not exist (for this, one would imagine, perhaps, was the asking the principle assumed originally), but the demanding the signification, at least, of a thing, both as for oneself and for another. For this also amounts to a necessity, if he is to say anything at all; for if he does not, there would be no possibility of a rational discussion with

such a one, neither for himself relatively to himself, nor to another. If any one, however, would grant this, there will be a demonstration in existence; for now will there actually be in existence something that has been determined. But the cause is not the person demonstrating, but the person sustaining the argument; for, by overturning the discussion, he yet sustains the discussion. And further, he that acquiesces in this, hath acquiesced in the truth of something independent of demonstration; so that not everything would be so and not so.

In the first place, indeed, therefore, it is evident that this very assertion is true, because the name signifies the existence or the nonexistence of this particular thing; so that not everything would be so, and not so in this particular way. Further, if man signifies one thing, let this be a two-footed animal. Now, I say, that this signifies one thing; if this be man, whatever is a man, this, namely, the being a two-footed animal, is the being in man: but there is no difference should any one assert that more is thereby signified, provided only they have been reduced under proper definitions; for grant that upon each definition a different name may have been imposed. Now, I say, for example, if he would not assert that man signifies one, but many things, of one of which there is a single definition, namely, two-footed animal, yet, also, are there many others, but defined according to number; for its own proper denomination might be set down according to each of the definitions. But if its proper denomination should not be thus set down, but one would say that such signified an infinity of things, it is palpable that there would not be a definition of it at all; for the signifying not any one thing is the signifying nothing. And when the denominations are devoid of meaning, there is an end to mutual discussion, and, also, in reality, to discussion on the part of a man with himself. For it is not possible that a person should understand anything that is not capable of

understanding one thing: but, if it were possible, one name would be imposed on this thing. Let it, doubtless, be granted, as has been stated in the commencement, that a name significant of something be significant of one thing also.

It is not, therefore, possible that being in man signifies the same particular thing as the not being in man, if man is significant not merely of what is predicated of one, but even one thing itself; for this we do not require that the one should signify that which is predicated of one: since, if the case stands in this way, at least, the musical, and the white, and the man, would signify one thing; so that all things would be one, for they would be synonymous; and it will not be possible that the same thing be and not be, save by equivocation; just as if we would call any one a man whom others would call a not-man. The subject of doubt, however, is not this, if it is possible that the same thing at the same time should be and not be the man nominally, but really. But if the name man, and the name not-man, do not signify anything different, it is evident that the not being man will not differ from the being man. Wherefore, the being man will be the not being man, for they will be one thing; for this signifies that they are one—as a tunic and a cloak—if there is one definition of each. And if they shall be one, the being man and the not being man signify one thing; but it has been demonstrated that they signify a different thing.

There is a necessity, therefore, of this consequence, if there be a particle of truth in the assertion, that man in signification is equipollent with being a two-footed animal; for this was what the expression man was assumed to signify. Now, if there exists a necessity that this be the case, it is not possible for this very thing not to be a two-footed animal then, for this doth the phrase, "the being a necessity," signify, namely, the impossibility of its not being man. Accord-

ingly, it is not possible to be true to say at the same time that the same thing is both a man and is not a man. But there prevails the same mode of reasoning in the case of the not being man also; for the being of a man and the not being of a man signify a different thing, if, truly, both the being white and the being man are different; for much more is there opposition in this case to justify the difference of signification. But if, also, one would say that the white signifies one and the same thing with the being man, again will we make the same assertion, as has been declared on a former occasion, namely, that all things will be one, and not merely things in opposition. But, if this be not possible, that which has been declared will happen, if the question asked be answered.

If, however, when a simple question is put, one subjoin negations also, the question actually put is not replied to: for nothing hinders the same thing being both man and white, and other things ten thousand in multitude; but, nevertheless, if the question be asked, if it is true to affirm man to be this, or not to be so, the reply should be, that it signifies one thing, and no addition should be made that it is both white and large. For, also, it is impossible to go through accidents when, at least, they are infinite; either, therefore, let one go through all or none. In like manner, therefore, if, also, ten thousand times over they are the same thing, namely, man and not man, the reply to the question, if man is, should not be that at the same time also not man is, unless the reply likewise states, in addition, the rest of whatsoever things are accidents, as many as are so, and as many as are not; if this, however, be not done by the person asked the question, there is nothing under discussion at all.

But, in general, they who make this assertion overturn substance and essence, or the formal cause and very nature of a thing; for they must themselves needs affirm all things to be accidents, and that the essence of man or animal, what-

soever it be,* has no existence. For if there will exist the essential nature of anything whatsoever, such as is that which is to be man this will not be to be not man, or not to be man, although these are negations of this; for it was one thing which it signified, and this was the substance of a certain thing. But the signification of the substance of a thing is, that not anything else is the being of that thing: but if the being whatsoever man is will be found in this, being either whatsoever is not man, or whatsoever not is man, is a thing impossible; for it will be a something different. Wherefore, it will be necessary for them to say that a formal and substantial definition of this kind and one invariably suited unto the subject, will be one of a nonentity: but all things, as we have supposed, are according to accident; for in this lies the distinction between substance and accident, for the white is an accident in man, because he is white, but not anything whatsoever that is white.

But, if all things are spoken of according to accident, there will be no primary universal, if an accident always signifies a predication about a certain subject. There is a necessity, then, of going on in a progression to infinity. But this is impossible (for more than two of such are not connected together), for accident is not a thing that is accidental to that which is an accident, unless that both are accidental in the same subject. Now, I say this, for example, in the instance of the white being musical, and the latter being white, because both are accidents in man; but not on this account is Socrates musical, because it happens that both are accidents in a certain other subject. Since accidents, therefore, are spoken of some in this way and some in that, as many as are so expressed, as the white in Socrates, it is not possible should be infinite in an ascending series of productions in the case of man; as, for example, that in Socrates the white there should be some other different accident, for any one thing is not produced from all: nor, truly, in the

white will be found any different accident; as, for instance, the musical: for, also, in no wise rather is this an accident in that, than that in this. And, at the same time, the distinction has been made that some things are accidents after this manner, but others, as the musical in Socrates. But as to as many things as are accidental in this way, such are accidents not in such a way as an accident in what is accidental; but this is the case with whatsoever is accidental in that other way. Wherefore, all things will not be spoken of according to accident; something, then will be significant, also as of substance; and if this be so, it has been demonstrated that it is impossible that at the same time contradictions should be predicated of the same subject.

Further, if all contradictions are true at the same time concerning the same thing, it is manifest that all things will be one. For the same thing will it be, both a trireme, and a wall, and a man, if it is possible to affirm or deny anything of everything, as there is a necessity for those to do who assert the opinion of Protagoras. For if, also, to any one a man seems not to be a trireme, it is evident that he will not be a trireme: wherefore, also, he is, if the contradiction be true. And, doubtless, comes to pass a saying of Anaxagoras: "at the same time subsist together all things," so that, in reality, nothing is one. The indefinite, therefore, they seem to speak of, and, thinking that they mention entity, they talk about nonentity; for an entity in capacity, and not in actuality, constitutes the indefinite. But, doubtless, must we say to the authors of this hypothesis, that of everything either an affirmation or a negation must be predicated; for it would be absurd if in each thing there will be inherent the negation of itself, but that the negation of what is different, and which is not inherent therein, will have no existence. Now, I say, for example, if it is true to assert of a man that he is not a man, it is manifest also that he is not a trireme; if, indeed, therefore, there is truth in the affirmation, there is a

necessity that also there be truth in the negation: but if there is not truth in the affirmation, the negation, at least, of a trireme will more appertain to him than the negation of himself. If, therefore, that also be true, there will also be truth in the negation of the trireme; and if in the negation of this, in the affirmation also. And these consequences happen to those who make such a statement, even to the effect that it is not necessary to employ either affirmation or negation. For, if it is true that the same individual is man and not man, it is evident that such a one will be neither man nor not man; for of those two qualities there are two negations. But if that is one which is composed of both, this one would also be in opposition.

Further, indeed, respecting all things it is so; and a thing will be white and not white, and entity and nonentity, and it will be so respecting the rest of the assertions and negations in a similar manner; or this will not be the case, but only so regarding some, and not regarding others. And if, doubtless, it were not so respecting all, these would be indisputable; but if it be true concerning all, again, no doubt, in the case of whatsoever there is an assertion there will also be a negation; and in the case of whatsoever there is a negation there will likewise be an assertion; or in the case of whatsoever there is an assertion there will also be a negation; or of whatsoever, indeed, there is an assertion there is also a negation: but of whatsoever things there is a negation, of all such there will not be an assertion. And if this be so, there would be something indubitably a nonentity, and this will be a firm opinion; and if to be a nonentity be something both firm and known more firm would be the opposite assertion. And if, in like manner, also, it is necessary that in the case of whatsoever things one employs a negation he should employ an affirmation also, it would be true, undoubtedly, by dividing, to say either that a thing, for instance, is white, and again that it is not white, or that this would not be true.

And if, indeed, it is not true, by dividing, to say so, he does not affirm these things, and there is nothing in existence; but how can one speak of nonentities, or understand anything respecting them, or thus move forward in the paths of knowledge? And all things would be one, as it has been said heretofore, and both man, and god, and trireme, and the contradictions of them, will be the same. But if, in like manner, this be so in the case of each thing, in no wise will one thing differ from another; for if there will be a difference, this will be true, and a peculiarity of this. In like manner, also, if it is possible that he who makes the division should speak the truth, there happens that which has been declared. And to this reason we may subjoin the following: that all would speak the truth, and all would speak falsely, and one would acknowledge himself to be speaking what is false. At the same time, however, it is evident that the investigation with such a person is concerning nothing; for he affirms nothing. For neither in this manner nor in that is the assertion made with such a one, but in this manner and not in this manner. And again, at least, with respect to these points he makes a negation of both, because the assertion is made that they are neither so in this manner nor not in this manner, but both in this manner and not in this manner; for, if this were not the case, there would now be in existence something that has been defined. Further, if when an assertion be true the negation be false, and if when the latter itself be true the affirmation be false, it would not be possible at the same time to assert and deny the same thing with truth. But, perhaps, persons will say that this is what has been laid down from the commencement.

Further, does one who supposes that in a manner a thing either is so and so, or that it is not so, labour under a misapprehension? but he who thinks that it is both, does he speak truth, or can he verify his assertion? for if he affirms truth, what is the assertion, save that such is the nature of entities?

and if he does not affirm the truth, but rather he speaks truth who makes a supposition in that way, entities, in such a case, would, in a certain manner, be now disposed thus; and would this be true and not so at the same time, and yet, in reality not true? But if, in like manner, all both speak falsehood and speak truth, it is not possible for such either to utter or to declare anything, for at the same time he says the same things and not the same things. But if he makes no supposition, but in the same way thinks and does not think, in what way will he be disposed differently from plants?

Whence, also, it is especially manifest that no one either of the rest of the sceptics, or of those making this statement, is so affected. For why, may I ask, does he walk towards Megara, but not remain still, thinking that he is actually walking? nor straightway, at dawn, does he proceed to a well or a precipice? if he may chance to meet with such, he, however, appears cautious, as not considering the falling into it to be not good and to be good in the same sense. It is evident, accordingly, that the one he considers preferable, but the other as not preferable. And, if this be the case, both the one he must needs consider a man and the other not a man; and the one thing sweet, and the other not sweet. For not as of equal importance doth he investigate and regard all things, inasmuch as he thinks it better to drink water and to visit a certain person, and then seeks, in point of fact, for those very things. Although he ought to seek for all things with equal zest, if, in like manner, it were the same thing—I mean to say, both man and not man. But, as has been declared, there is no one who does not appear cautious in regard of the one set of things and not so in regard of the other. Wherefore, as it appears all men suppose that the case is absolutely so, if not concerning all things, at least, concerning what is better and worse. Now, if they do so not from scientific knowledge, but from opinion, much more must attention be paid to truth; just as also

the health of one that is diseased must be looked after more than that of a person that is sound: for he that indulges in theory or surmise, compared with one possessed of scientific knowledge, is not healthfully disposed towards truth.

Further, although as much as possible all things should especially be so and not so, yet, at any rate, the more and the less are inherent in the nature of entities; for one would not say that two and three were similarly even, nor does a person in the same manner assert an untruth who thinks four five, as he who thinks it a thousand. If, therefore, he be not deceived, in the same manner, it is evident that the other is less deceived in this way, so that he affirms what is more true. If, therefore, that which is more true to be more immediate to the truth, there would be something true, at least, to which what is more contiguous will be more true. And even if nothing should be true, yet now, at any rate, is there something that is more firm and more true than another; and so in this way would we be liberated from that intemperate theory alluded to, and one which forbids the definition of anything mentally.

V

NOW, FROM THE SAME OPINION ORIGINATES ALSO THE THEORY of Protagoras; and in like manner is there a necessity that both of them should be or not be capable of verification. For if all things that seem so are true, and if all things that are apparent are true, then must all things, at the same time, be true and false. For many entertain contrary opinions to one another; and those who do not happen to think the same with themselves they regard as victims to delusion; so that the same thing must needs be and not be. And, if this be the case, it is necessary that all things that seem so should be true; for opposite sentiments do they hold with one

another who speak falsehood and who speak truth. If, then, things be so, all will speak truth: that from the same opinion, then, both of these theories originate is evident.

There does not, however, exist the same method of conducting our controversy as regards all such philosophers, for some of them require persuasion, and some compulsion. For as many, indeed, as have formed opinions in this way from doubt, the ignorance of these is remediable, for the refutation is directed towards not the theory, but the understanding; and as many as speak for argument's sake, refutation is a cure also of these, both of that discourse which consists in voice, and of that which consists in names. But unto those persons who labour under doubt in this way has the opinion itself originated from sensibles; the opinion, I mean, that contradictions and things contrary subsist together, inasmuch as they see contraries arising from the same thing. If, therefore, it is not possible that nonentity should come into existence, in a similar way, according to them, must the thing have pre-existed, namely, as both contraries at once; as also Anaxagoras says and Democritus, that everything was mingled in everything; for, also, this latter philosopher maintained that vacuity and fulness are similarly resident in any part whatsoever, although the one of these is entity and the other nonentity.

Respecting, indeed, therefore, those who form their opinions from these data we will say that in a certain manner they speak correctly, and that in a certain sense they are involved in ignorance. For entity is spoken of in a twofold point of view; so that it is in a way admissible that something should arise from that which has no being, and that it is in a way not admissible that it should be so; and that the same thing at the same time should be an entity and a nonentity, but not according to the same entity; for in capacity, no doubt, is it admissible at the same time for the same thing to be contraries, but in actuality not so. And, further, shall

we deem them to suppose the existence of a certain other substance of entities in which is inherent neither motion, nor corruption, nor generation at all.

And, in like manner, also, has the truth respecting the things apparent reached some speculators from sensibles. For they do not consider it fitting that the true should be decided by plurality or fewness; but the same thing seems sweet to some on tasting it, and to others bitter. Wherefore, if all persons were sick, or all beside themselves, but two or three were sound in health, or in possession of their mind, it would happen that these latter would appear to be ill and labouring under an aberration of intellect, but that the rest would not seem so. Further, to many of the rest of the animal creation do contraries appear to be the same thing as well as to us; and to each very person with himself things do not always, according to sense, appear to be the same: which description of these, therefore, is true or false is obscure; for nothing the more is this true than that, but both in like manner are affected as regards truth. Wherefore, Democritus says, at least, that, positively, either nothing is true, or that, if it be so, that to us it is wrapped in obscurity.

But, upon the whole, on account of their supposing prudence, no doubt, to be sense, and that this sense constitutes an alteration, these persons affirm that the apparent, according to sense, is necessarily true; for from these sceptics both Empedocles and Democritus, and each of the other philosophers, so to speak, have become entangled in opinions of this sort. For Empedocles, also, asserts that those changing their habit change their prudence; witness his words:

"For for the present counsel varies in men."

And in other passages he says, that

"As far as diverse men become, so far

Is present, also, in them always diverse thought."

And Parmenides evinces the same mode of thinking; for instance, in the words:

"For as each has a tempering of graceful limbs,
So present in man is mind. For the same thing
With whatever thinks is the nature of limbs in men,
Both every and all, for more than this is mind."

And the apothegm of Anaxagoras, also, is remembered amongst certain of his associates; namely, that entities are such to them as they may have supposed them. Now, they say that even Homer seems to have been in possession of this opinion, because he made Hector, after he was deranged from the wound, to lie in a delirious state; as if even those of unsound mind were capable of exercising thought, indeed, but not the same thoughts as with those of sound mind. It is evident, therefore, if both be exertions of prudence, that also entities subsist in this way, and not in this way, at the same time.

Wherefore, also, most difficult is that which ensues from this theory; for if they who particularly perceived as true that which it is admissible should be true (but these are they who especially seek after it and love it); if these persons hold such opinions, and manifest such tenets respecting truth, how is it not becoming those to despair who attempt to philosophise? for the pursuit of things eluding their grasp would constitute the investigation of truth. But a cause of this opinion of theirs is the following: that from time to time they have examined into the truth, concerning entities, no doubt, but the entities they have supposed to be sensibles merely. Now, in these is inherent much of the nature of the indefinite and that of entity, which subsists in such a manner as we have declared. Wherefore, they speak naturally; but they do not speak things that are true. For so is it more in harmony for them to speak after this manner than as Epicharmus in his reply to Xenophanes.

But, moreover, seeing the whole of this visible nature in motion, but respecting what is being changed seeing nothing verified—regarding, at least, what is being changed altogether and everywhere—they considered that verification was not a thing that is possible: for from this hypothesis blossomed that most extreme opinion of those philosophers mentioned just now; namely, that of those speculators who professed to adopt the philosophy of Heraclitus, and such as Cratylus held, who at last was of opinion that one ought to speak of nothing, but moved merely his finger; and who rebuked Heraclitus for saying that it is not possible to enter the same river twice: for he himself was of opinion that you could not do so once.

In reply, however, to this theory we will also say, that there is some foundation in reason for their supposing with these, that that which undergoes a change, when it does change, may not be considered as existing. This, however, is a circumstance attended with doubtfulness, for the rejecting substance retains something of that which is rejected; and of that which is being produced must there now necessarily exist something: and if, in short, it is undergoing corruption, there will subsist a certain entity; and if it is being produced, there must needs be that from which it is produced, and by which it is generated, and that this process goes not on in a progression to infinity. Omitting, however, these arguments, let us make those assertions following; namely, that not the same thing is the alteration according to quantity and according to quality; grant, indeed, that, as far as quantity goes, it does not abide the same; but it is according to form that we know all things. But, further, it is worth while reproving those who think thus, because, although knowing the number of sensibles themselves, and that in the case of the fewer number of sensibles this state of flux and mutation was to be found, they have yet manifested similar sentiments respecting the whole heaven. For

the place about us, of what is sensible, continues alone to subsist in a condition of corruption and generation; but this in no wise, so to say, is part of the universe: wherefore, more justly would it be, on account of the greater number of witnesses, to have acquitted these, than on account of these, the fewer, to have condemned those. And, further, is it evident that in reply, also, to these we may use the same arguments with those that have been originally laid down by us; for that there is some nature immovable has been demonstrated to their satisfaction, and has gained their assent. It happens, however, to those, at least, who say that a thing is and is not at the same time, to affirm all things to be in a state of rest, rather than of motion; for, on this hypothesis, there exists nothing into which anything is changed, for all things are inherent in all.

Regarding, however, the truth that not everything that is apparent is true, in the first place, indeed, it might be replied, that sense, to be sure, is not deceitful in what falls within its own peculiar province, but that imagination is not the same with sense. It is worthy of consideration and wonder, in the next place, if they really are in doubt of this, whether magnitudes are so great, and colours such as they appear to those at a distance, or such as they appear to those that are near? and whether they are such as they appear to persons in health, or such as they appear to persons in sickness? and, in regard of weight, whether things more weighty are such as appear so to the weak, or such as seem so to the strong? and lastly, in respect of truth, whether things are true such as appear so to the sleeping, or such as seem so to those who are awake? for that they do not, in reality, think so, at least, is evident; for no one, if even he supposes when asleep by night that he were in Athens, when he is in Libya, goes when he awakes, to the Odeion.

And, further, respecting the future, as also Plato says, doubtless, not similarly decisive is the opinion of the physi-

cian and that of the ignorant quack; for example, as to the likelihood that one will be sound, or that one will not be so: and, further, in the case of the senses themselves, not similarly decisive is the testimony of sense in respect of what is foreign, and in respect of what is its peculiar province, or of that which is near and of that which is remote from itself. But respecting colour it is sight and not taste that judges; and respecting juices it is taste but not sight, each of which never at the same time affirms about the same thing that simultaneously a thing is so and not so disposed. But neither in a different period have the senses doubted about the passion, at least, to which they are subject, but about that in which the passion is an accident. Now, I say, for example, that the same wine, either from being changed, or from the bodily organ being changed, might so appear at one time to be sweet, and at another time not sweet; but the sweet then, at least, when it is sweet is not such, for it never has undergone a change; but always verification thereof is possible, and of necessity is it that such will be a thing that is sweet. All these theories, however, overturn this conclusion, since, also, if there is not a substance of anything neither is there anything necessarily subsisting; for it is not admissible for the necessary to be at one time disposed one way, and at another time another: wherefore, if there is anything of necessity, it will not be disposed both so and not so.

If, also, upon the whole, what is sensible exists merely, nothing would there be subsisting, inasmuch as animated beings would have no existence; for sense would have no existence. Perhaps, then, on the supposition of the non-existence of sense, the truth would be, that neither sensibles nor sensations exist (for of the percipient is sense an affection); but that it is impossible that the subjects themselves which produce sense have not any existence, even though sense exist not. For, doubtless, sense itself is not of itself; but

there is something else, also, different from, and independent of, sense, which must needs be prior to sense; for the moving cause is prior in nature to that which is being moved: and if these assertions are made one with another, not a whit the less is the same theory true.

VI

BUT THERE ARE SOME WHO DOUBT AND ARE SCEPTICS BOTH amongst those who are persuaded of the reality of these opinions and those who merely affirm these theories for they ask, who is it that judgeth him that is in good health, and him that, upon the whole, is capable of forming his decision correctly about each particular? Now, doubts of such a sort as this are similar to one's doubting whether we now sleep or are awake. For all such doubts are tantamount to the same; for these persons demand that there should be a reason of all things: for they seek for a first principle, and expect to obtain this by demonstration, whereas, at least, that they are not persuaded of the validity of their position they make manifest in their acts. But, as we have said, this is the characteristic property of these philosophers, for they seek for a reason of things of which there is no reason; for the principle of demonstration is not demonstration. These, therefore, indeed, would be easily persuaded of this, for it is not difficult to apprehend.

They, however, who seek in reason compulsion merely, seek an impossibility; for what is contrary they deem it right to speak, immediately uttering contrary things. But if all things are not relatives, but some are also themselves by themselves, that is, absolute, in such a case everything apparent would not be true, for the apparent is apparent to some one: therefore, he that says that all things apparent are true, makes all entities relatives. Wherefore, also, must the pre-

caution be adopted by those who seek for compulsion in reason, and at the same time, also, think right to subjoin a reason that not the apparent is true, but that the apparent is true to whomsoever it appears so, and when it appears, and how far, and in what manner.

But if they subjoin a reason, to be sure, but do not in this way subjoin it, it will happen speedily unto them that they should speak things that are contrary. For it is possible for the same thing to appear honey, as far as the sight goes, and not to appear so to the taste; and, as we have two eyes, not the same will a thing appear to each organ of vision if they be dissimilar. Whereas, in reply to those, at least, who, on account of the causes originally enumerated, affirm the apparent to be true, and for this reason contend that all things in like manner are false and true; in reply to these, I say, it may be affirmed that neither the same things appear the same to all men, nor to the same person do the same things invariably appear the same, but frequently things contrary at the same time; for the touch, in the alteration of the fingers, says that there are two objects, but the organ of sight one; but neither to the same sense, at least, do the same things seem the same, and according to the same, and in like manner, also, in the same moment of time: wherefore, this would be true. But, perhaps, for this cause it is necessary to say to those who speak not on account of doubt, but for talk's sake, that this is not absolutely true, but that it is true relatively to this person.

And, as doubtless it has been formerly affirmed, it is necessary, also, to make all things relative, both in reference to opinion and sense; so that nothing either has been produced or will arise except on the supposition of some person previously exercising thought. But if anything has been generated or will arise, it is evident that all things would not be according to opinion. Further, if one thing exists, it exists in relation to one, or in relation to a definite thing; and if

the same thing is both half and equal, such exists in relation to these; yet the equal is not in reference to the double. Now, in relation to opinion, if man and the subject of the opinion be the same, man will not be the thinking subject, but the subject of opinion. But if each thing will be in relation to the thinking subject, the thinking subject will subsist in relation to things infinite in species. That, indeed, therefore, most indisputable of all is the opinion, that assertions in opposition are not at the same time true; and what happens in the way of consequence unto those who say that they are true, and why they say so, let thus much suffice to have been spoken.

But since it is impossible that contradiction should be true of the same subject at the same time, it is evident that neither can contraries possibly subsist at the same time in the same subject. For, indeed, of contraries one or other is not the less privation. But privation of substance is negation from some definite genus. If, therefore, it is impossible at the same time to affirm and deny with truth, it is impossible that also contraries should be inherent in the same subject at the same time; but either both must be inherent partially, or the one partially and the other simply or absolutely.

VII

BUT, TRULY, NEITHER IS IT POSSIBLE THAT THERE IS ANY MEAN between a contradiction; but there is a necessity either of asserting or denying any one thing whatsoever of one. Now, in the first place, this is evident to those who define what truth and falsehood are. For, indeed, the assertion that entity does not exist, and that nonentity does, is a falsehood, but that entity exists, and that nonentity does not exist, is truth. Wherefore, the person who affirms that this medium is in existence or is not will speak truth or utter falsehood.

But neither is entity nor nonentity said not to exist or to exist.

Further, either will there be a mean between contradiction, as that of a darkish colour between black and white, or it will be as that which is neutral between man and horse. If, therefore, this subsist in this way, there would be no change (for a change takes place from something that is not good into that which is good, or from this latter into what is not good); but now it is always apparent as taking place, for there is not a change existing but one into opposites and media. If, however, there is a mean, so also would there be a certain production into a thing that is white, not from that which is not white; but this is not perceived as being the case.

Further, everything intelligible and mental the understanding either affirms or denies; and this is manifest from definition when truth is spoken or falsehood; when, indeed, in this way it is composed, as an assertion or negation, truth is spoken; but when in that way, falsehood. Further, must there be in all contradictions a mean, save where the assertion is made only for argument or talk's sake, so that also one will neither utter truth nor not utter truth. And, besides entity and nonentity, there will be something in subsistence: wherefore, besides generation and corruption, some change will there be. Moreover, in whatsoever genera negation introduces the contrary, in these also will be found this medium; as, for example, in numbers a number neither odd nor not odd: such, however, is impossible, and from the definition is this evident. Further, would we go on in a progression to infinity, and not only will there be sesquialterate entities, but even more than this. For, again, it will be possible to deny this in regard of the assertion and negation of the medium of the former contradiction; and this will be something, for there will be a certain other substance of this. Moreover, as to the question if a thing is white when one

says that it is not, nothing has he denied than that it is; but that a thing is not, amounts to a negation.

But from the same source as other paradoxes has this opinion reached unto certain speculators; for when they are unable to solve arguments open to dispute, giving in to reason, they consent to the truth of whatever is brought out by syllogism. Some, therefore, make assertions from some such cause as this, but others on account of requiring in their investigations the reason of all things.

The principle, however, in respect of all these, is to be derived from definition. But definition arises from their necessarily signifying something; for the sentence of which the name is a sign becomes the definition of a thing. And the theory of Heraclitus, affirming all things to be and not to be, appeared to make all things true; but that of Anaxagoras was, that there is a certain medium between contradiction; so that all things are false, for when they are mingled, neither is the mixture good nor not good: wherefore, there is nothing that one can affirm as true.

VIII

NOW, THESE DISTINCTIONS HAVING BEEN LAID DOWN, IT IS evident that the predications made in one way only, and also those that are made about all, it is impossible should be as certain affirm they are; some, indeed, saying that nothing is true (for nothing, they say, hinders all things from being in such a way as that the diagonal of a square is commensurable with its side); but others affirming that all things are true. For almost all these assertions are the same with those of Heraclitus; for this philosopher, in affirming that all things are true and all things false, affirms also separately each of these theories. Wherefore, if those are impossible, it is impossible, likewise, that these should be so.

But, further, are those palpably contradictions which, likewise, it is not possible should at the same time be true. Nor, doubtless, is it possible that all should be false, although, at least, it would the rather seem to be admissible from what has been stated. But, in reply to all such theories, must the question be asked (as also has been declared in the discussions above), not if there is something or if there is not, but if something has a signification. Wherefore, from the definition is the discussion to be drawn, by assuming what falsehood or truth signifies. But if the true and the false be nothing else than to assert what is true or deny what is false, it is impossible that all things be false; for it is necessary that either portion of the contradiction be true. Further, if it be necessary either to assert or deny everything, it is impossible for both to be false; for either part of the contradiction is false.

Truly, also, doth the common saying happen unto all such theories, that they overthrow or stultify themselves. For the person that says that all things are true renders the statement contrary to this true also: wherefore, he makes his own affirmation not true; for the contrary says that it is not true; but he that says that all things are false, even himself falsifies his own position. If, however, they make an exception, the one making an exception in the case of the contrary that it is not alone true, and the other in the case of his own assertion that it is not false, in no wise the less does it happen unto these sceptics that they require the truth and falsehood of an infinite number of assertions: for he who says that a true theory is true agrees with the affirmation that it is true; but this will go on in a progression infinity.

It is evident, however, that neither they who lay down that all things are at rest speak the truth, nor they who say that all things are in motion. For if, indeed, all things are at rest, the same things will always be true and false. Now, this appears to be a thing undergoing a change. For he

who speaks once himself was not, and again will not be. If all things, however, are in motion, there will be nothing that is true; all things, in that case, are false. But it has been demonstrated that this is impossible. Further, must entity needs undergo a change; for from something into something is the change made. But, doubtless, neither are all things at rest or in motion at any particular time; but nothing subsists in such a condition of rest or motion eternally: for there is something which always moves the things that are in motion, and the first imparter of motion is itself immovable.

BOOK VI

I

THE FIRST PRINCIPLES AND CAUSES OF ENTITIES ARE UNDER investigation; and it is evident that the investigation regards the causes and first principles of entities, so far forth as they are entities. For there is a certain cause of health, and of a good habit of body, and of mathematical entities; likewise are there first principles, and elements, and causes; and in general, also, every science which is an intellectual one, or in any degree even partaking of the faculty of thought is conversant about causes and first principles, which are either more accurate or more simple, as the case may be. All of these, however, being descriptive of one particular subject, and a particular genus, are engaged about this; but not concerning being or entity simply considered, nor so far forth as it is entity: nor do they make any account of the substance of a thing, but from this one particular subject, partly from sense making this manifest, and partly assuming an hypothesis as to substance or quiddity; they, accordingly, demonstrate the things that are essentially inherent in the genus about which they subsist, either more necessarily or

more feebly. Wherefore, it is evident that there is not a demonstration of substance, nor of "the what" a thing is, that is, of quiddity, by means of an induction of such a kind; but there is some other mode of manifestation. In like manner, also, these sciences say nothing as to whether the genus about which they are engaged is or is not, on account of its belonging to the same faculty of thought or understanding, and of its making manifest the nature of a thing, and whether it is this particular thing.

But since, also, physical science happens to be conversant about a certain genus of entity (for about such a sort of substance is it conversant in which is contained in itself the first principle of motion and of rest), it is evident that it is neither practical, nor productive, that is, effective; for the first principle of things that are productive resides in the producer or efficient cause, whether that principle be mind, or art, or a certain capacity, but the first principle of things that are practical is free-will in the agent; for the same thing is an object of action and of free-will. Wherefore, if every dianoetic faculty be either practical, or productive, or speculative, the physical dianoetic energy would be some speculative science; but speculative about such an entity as it is possible should have motion imparted to it, and about such a substance as, existing according to reason, for the most part has not a separable subsistence merely. It is requisite, however, as regards the essence or formal cause, and the definition how things are so, that this should not escape our notice, as without this knowledge, at least, the present investigation would be the accomplishing of nothing. But of things that are defined, and to which the inquiry what they are belongs, some subsist in such a manner as the flat-nose, and some as the hollow. And these differ, since flat-nose is conceived along with matter, for, in truth, a flat-nose is a hollow-nose; but hollowness or concavity is without sensible matter. If, therefore, all physical

or natural things are predicated in the same way as flat-nose—as, for instance, nose, eye, face, flesh, bone, in short, animal, leaf, root, bark; in short, plant (for the definition of none of these subsists without motion, but such invariably involves matter)—it is plain how it is necessary in physical inquiries to investigate the nature of a thing, and to define it, and why, also, it is the part of the natural philosopher to institute an inquiry concerning a certain soul, namely, such a soul as is not unconnected with matter; that therefore the physical dianoetic energy is speculative is evident from these statements. But also the mathematical dianoetic energy is speculative also; whether it is conversant, however, about entities that are immovable, and capable of a separate subsistence, is a point that at present is obscure: but that certain mathematical systems investigate certain entities, so far as they are immovable, and so far as they have a separable subsistence, is clear.

Now, if there is something that is eternal and immovable, and that involves a separate subsistence, it is evident that it is the province of the speculative, that is, of the ontological, science to investigate such. It is not, certainly, the province of physical science, at any rate (for physical science is conversant about certain movable natures), nor of the mathematical, but of a science prior to both of these, that is, the science of metaphysics. For physical science, I admit, is conversant about things that are inseparable, to be sure, but not immovable; and of mathematical science some are conversant about entities that are immovable, it is true, yet, perhaps, not separable, but subsisting as in matter. But Metaphysics, or the First Philosophy, is conversant about entities which both have a separate subsistence and are immovable; and it is necessary that causes should be eternal, all without exception, but particularly these: for these are the causes of the things that are manifest or phenomenal amongst those that are divine.

Wherefore, according to this view of things, there would be three speculative philosophies; namely, the mathematical, the physical, the theological. For it is not obscure that if what is divine exists anywhere, it resides in such a nature as this; and it is requisite that that should be the most honourable science which is conversant about a genus of things which is most entitled to our respect. The speculative sciences, accordingly, are more eligible than the rest of the sciences; and of such as are speculative, this science of metaphysics, now under investigation, is more eligible than all the others.

For one would feel a doubt as to whether at all the first philosophy, or ontology, is universal, or conversant about a certain genus and one nature. For neither is there the same method of conducting our inquiries in the mathematical sciences; but geometry, in fact, and astronomy, are conversant about a certain peculiar nature: yet, in reply to this, I would say that pure mathematics universally is common to all the branches of that science, and thus that the first philosophy universally is common to all the sciences. If, then, there is not some different substance besides those that consist by nature, the physical would be the first science; but if there is a certain immovable substance, this will be prior, and the subject of the first philosophy, and in this way will subsist universally, because it is the first of the sciences; and it would be the province of this science of metaphysics, or ontology, to institute an inquiry respecting entity, so far forth as it is entity, and respecting quiddity, or the nature of a thing, and respecting those things that universally are inherent in it, so far forth as it is entity.

BOOK XI

I

THAT, INDEED, WISDOM IS A CERTAIN SCIENCE CONVERSANT about first principles is evident from the early portions of this work, in which doubts have been expressed respecting statements that have been put forward by others concerning first principles; one, however, would feel doubtful as to whether it would be requisite to suppose Wisdom or Ontology to constitute one science or many? For if it does constitute one science, there is, at any rate, one science invariably of contraries; but first principles are not contraries. If, however, it does not constitute one science, as of what quality must we posit these many sciences? Further, to speculate into demonstrative first principles, is it the province of one or of many sciences? for if of one science, why, let me ask, is it the province of this more than of any other whatsoever? but if such speculation belong to many sciences, what sort must we consider these to be? Moreover, whether is there one science of all substances, or not? for if there is not one science of all, it would be difficult to render an account of what sort of substances there is one science in existence; if, however, there is one science of all substances, it is an obscure point how it is admissible that there should be the same science of many substances. Further, the question arises as to whether demonstration is conversant about substances only, or also about accidents? for if demonstration be conversant, at least, about accidents, it is not conversant about substances. But if there is one demonstrative science about accidents, and another about substances, what, may I ask, is the character of both, and which of the two constitutes Wisdom or Metaphysics? for demonstrative wisdom is that which is conversant with accidents; that,

however, which is conversant with first principles is the wisdom that takes cognisance of substances.

Neither, however, must we consider the science at present under investigation as a science respecting the causes that have been already enumerated in our treatise on Physics. For neither should we act thus in regard of "the final cause"; for a thing of this kind is that which is good: and this resides in practical things, and in those entities that are in motion; and this imparts motion in the first instance, for the end is a thing of this sort: but the imparters of motion in the first instance does not inhere in those things that are incapable of motion.

And, in general, one feels doubtful as to whether the science now under investigation is conversant about sensible substances at all, or not about these, but about certain other substances? for if metaphysical science be conversant with substances different from those cognisable to the senses, it will be conversant either with forms or mathematical entities. As regards forms, then, it is evident that they have no existence. But, nevertheless, one would feel doubtful, even though he should admit the existence of these forms, why, forsooth, as in the case of mathematical entities, the same truth does not hold good in regard of other things of which there are forms? Now, I say that they have placed mathematical entities, no doubt, as intermediate between forms and things cognisant by sense, as it were certain third natures beside both forms and those things that are here—I mean, sensibles—but there is no third man, nor a third horse, beside both actual man, and actual horse, and singulars. And if, on the other hand, these mathematical entities do not subsist in the manner they affirm, about what sort of entities are we to assert that the mathematician is engaged? for, surely, he is not engaged about those things that are here,—that is, about sensibles,—for none of these constitutes the description of entity which the mathemati-

cal sciences investigate. Neither, certainly, is the science now under investigation—I mean, Metaphysics—conversant about mathematical entities, for no one of these possesses a separable subsistence. Nor, however, is it a science belonging to substances cognisant by the senses, for these are corruptible. And, in short, one would feel doubtful as to what sort of a science belongs the investigation of the matter of mathematical entities; for neither does it belong to physical or natural science, from the fact that the entire attention of the Natural Philosopher is engaged about those things that contain in themselves the first principle of motion and rest: nor, unquestionably, is it the province of a science that institutes an inquiry respecting both demonstration and scientific knowledge; for respecting this very genus it creates for itself an investigation. It remains, therefore, that this proposed Philosophy of Ontology, or Metaphysics, should make these a subject of its inquiry.

And, again, one would feel doubtful as to whether it is requisite to consider the science under investigation in the present Treatise as conversant about first principles—I mean, such as by some speculators are denominated elements? These, however, have been regarded by all philosophers as things that are inherent in composite natures. But it would rather appear to be a thing that is necessary that the science of ontology, under investigation at present, ought to be conversant with universals; for every rational principle, and every science, are conversant about universals, and not about the extremes of things. Wherefore, in this case ontology would be conversant about primary genera.

And these would constitute both entity and unity; for these especially would be supposed to comprise all existences, and in the most eminent degree to be assimilated unto first principles, on account of their being classed in the category of things that derive their primary existence from Nature: for when these have been corrupted, other things

also are corrupted at the same time along with them; for everything amounts to entity and unity. As far forth, however, as it is necessary that differential qualities participate of these, if one will admit the subsistence of these genera—now no difference participates in the genus—thus far, likewise, would it appear that we ought not to establish these either as genera or first principles. But, further, on the supposition that that which is more simple is more a first principle than that which is less simple, but the extremes of those things that descend from the genus are more simple than the genera—for these are individuals, whereas the genera are divided into numerous species and such as are different—hence species would appear to be a first principle more than genera. As far forth, however, as species are liable to corruption in conjunction with their genera, the genera rather would seem to be more similar to first principles; for that which brings about the destruction of other things in conjunction with itself is a first principle.

These, then, and other such points are some of those questions that involve matter of doubt.

II

FURTHER, MAY THE QUESTION BE RAISED AS TO WHETHER IT is expedient to admit the existence of something besides and independent of singulars, or not? but the science now under investigation is conversant with these. These are, however, infinite. Those things, at any rate, which have a subsistence independent of and beside singulars are, without doubt, either genera or species; but the science at present under investigation is not a science conversant about either of these; for the reason why this is impossible has been already stated. For in general, likewise, doth the following questions involve a doubt—namely, as to whether it is necessary

to suppose the existence of any substance separable from sensible substances and those which are here or whether this is not the case? but shall we say that these sensible things are entities, and that Wisdom is conversant about these? for the fact is we seem to investigate some different science; and this stands forth as the point proposed by us for investigation. Now, what I mean is this, that our aim is to discover whether there is anything that essentially involves a separable subsistence, and which does not reside in any nature belonging to those objects that are cognisant by the senses?

But, further, allowing that there is beside sensible substances any different substance, what sort of sensibles are those beside which it is requisite to establish the subsistence of this substance? for why should one seek to establish its existence beside men rather than horses, or beside these in preference to the rest of the animal creation, or in general to inanimate things likewise? Notwithstanding, the providing of different substances eternal in duration, equal in amount to substances that are cognisant by sense and subject to decay, would appear, perhaps, to fall outside the province of the rational sciences.

If, however, the first principle now under investigation be not separable from bodies, what other would one admit as existing in preference to matter? This, however, does not involve a subsistence in energy, indeed, but in capacity. Rather would species and form seem to be a first principle in a stricter sense of the word than this. Now, this is a thing that is subject to corruption: wherefore, in short, there does not subsist an eternal substance that involves a separable existence as well as an essential subsistence. But such a position as this is absurd; for it appears to be the fact—and such are the subjects of inquiry at the hands nearly of all those that are most accomplished philosophers—that there is in subsistence a certain first principle

and substance of this description; for how, let me ask, will there prevail order on the supposition that there is no subsistence of that which is eternal, and which involves a separable existence, and is permanent?

But, further, admitting that there is a certain substance, and first principle, naturally of such a description as we are at present investigating, and this one principle belongs to all things, and the same is the principle of those things that are eternal, and those that are corruptible, the question, in such a case, arises, why, on the supposition of the existence of the same first principle, some things are eternal amongst those that may be ranked under this first principle, but others are not eternal? for this constitutes the absurdity. If, however, there is one first principle of things that are corruptible, and another of those that are eternal—if, indeed, the principle, likewise, of those that are corruptible be eternal—we shall be involved in similar perplexity; for why, on the supposition of the existence of an eternal first principle, are not those things that may be classed as effects under this first principle eternal likewise? and, on the supposition of the existence of a corruptible first principle, there arises a certain other principle of this, and again a different one of that; and so this progression of causes goes on to infinity.

But if, on the other hand, one will seek to establish the existence of both entity and unity, as those things that appear in the most eminent degree to be immovable first principles, in the first place, unless each of them signifies this certain particular thing and substance, how will they involve a separate subsistence, and an essential one? But it is respecting those eternal and original first principles of this description that we are engaged in our investigations in the present Treatise. Nevertheless, supposing both of them to signify this certain particular thing, and substance, all the entities will be substances; for entity is predicated of

all things, and unity, also, of some. That all entities, however, are substances is an assertion that is false.

But, further, how can the position of those be true who make out that unity is *the* first principle, and that this constitutes substance, and who from unity and matter generate the first number, and say that it is the substance of these—how, I say, does this assertion of theirs admit of being true? for how is it requisite intellectually to apprehend, as one, the duad and each of the other compound numbers? for on this point they neither say anything, nor would it be easy to make any assertion on the subject. Suppose, however, that any one will seek to establish, as first principles, lines, or the things that are connected consequentially with these—now, I mean, surfaces such as are primary—yet these are not substances capable of a separate subsistence, but are sections and divisions; the former of surfaces, but the latter of bodies: but points are sections and divisions of lines; and, further, they are the limits of these very same things, and all these are inherent in others, and there is no one of them that is separable. Further, in what way is it necessary for us to conceive the existence of a substance of unity and of a point? For of every substance is there generation, but of a point there is not, for a point amounts to division.

And this, likewise, furnishes a subject of doubt; namely, that every science should be conversant about things that are universal, and about that which is of such and such a quality, but that substance should not belong to things universal, but rather should constitute this certain particular thing, and that which possesses a separable subsistence. Wherefore, if we admit that science is conversant about first principles, how is it necessary to consider substance as the first principle of things?

Further, the question may be asked, is there anything beside entirety, or not? now, I mean by entirety, matter, and that which subsists in conjunction with this; for if, in

fact, this be not the case, all things, at least, that reside in matter are subject to corruption. If, however, there subsists anything beside entirety, it would constitute the species and the form. In the case of what things, therefore, this would subsist, and in the case of what things it would not, it would be difficult to determine; for in the case of some things is it evident that the form is not a thing that is capable of a separate subsistence: as, for example, the form of a house is not separable from the house. And, further, there is the question whether first principles are the same in species, or in number? for if they are one in number, all things will constitute these.

III

SINCE THE SCIENCE OF THE PHILOSOPHER, HOWEVER, IS CONVERSANT about entity, so far forth as it is entity, and this universally, and not as regards any one part, and since entity is multifariously predicated, and not in one way merely—this being the case if entity be predicated equivocally, and not according to anything that is common—it does not fall under the province of one science to inquire into it (for there is not one genus of things of this kind); but if it be predicated according to anything that is common, it would fall under the notice of one science.

Now, it appears that it is predicated after the same manner as both what is medicinal and salubrious; for, likewise, are both of these predicated multifariously. And in this way each is predicated in respect of the one being somehow referred to medicinal art, but the other to health, and a third to something else; yet each is referred to the same thing. For a medicinal discourse, and a small knife, are denominated in respect the former of proceeding from medicinal science, but the other because it is serviceable to this art of

medicine; and in like manner it is so with that which is salubrious: for a thing is termed thus partly because it is indicative of health, and partly because it is productive of it.

And the same mode exists in the case of other things: in the same way, therefore, is denominated entity in its entirety; for each of them is styled entity in respect of being a passion, or habit, or disposition, or motion, or something else of this sort, belonging unto entity, so far forth as it is entity. Since, however, there is a reduction of every entity to a certain one thing, and something which is common, so of contrarieties, likewise, each will be reduced to the primary differences and contrarieties of entity, whether multitude and unity, or similarity and dissimilarity, are the primary differences of entity, or whether there are certain other differences of such; for let these stand over as subjects for future discussion. But there is no difference whether the reduction of entity be made to entity or to unity. For even if they be not the same, but something different, they are, at any rate, convertible terms; for both unity, also, in a manner constitutes entity, and entity constitutes unity.

Since, however, it is the province of one and the same science to speculate into all contraries, and since each of those is predicated according to privation—although, as regards some contraries, at least, of which there is a certain medium, one would feel perplexed as to how they are predicated according to privation; as, for example, of the unjust and the just—this being the case, concerning all such contraries, I say, is it necessary, therefore, to posit privation as existing, not of the whole definition, but of the ultimate species; for instance, if one is a just man who, through a certain habit, has been from time to time obedient to the laws, the unjust man will not be altogether deprived of the entire definition of just man: but inasmuch as in respect of habitual obedience to the laws he is in some point or degree deficient, in this respect, likewise, will there be inherent in

him a privation of this definition. And in the same manner is it the case with other things.

But as the mathematician institutes for himself an inquiry regarding abstract quantities—for he conducts his speculations by removing out of his consideration all sensible natures, such as gravity and lightness, and hardness, and its contrary, and further, also, heat and cold, and other sensible contrarieties, but he merely leaves remaining quantity and continuity—some of which pertain to one, but others are in reference to two, and others to three, dimensions—as well as the passive conditions of these, as far forth as they are quantities and continuous; and this being the case, the mathematician does not speculate into them in reference to anything else; and of some things he examines into their natures and positions, one in respect of another, and into those things that are inherent in these, but of others into their commensurations and incommensurations, and of others into their ratios or proportions: but we, nevertheless, have established one and the same science as being conversant about all subjects of this kind, I mean, the science of the geometrician—in the same manner, therefore, is it the case in respect of entity likewise. For the things that are accidental in this, so far forth as it is entity, and the contrarieties of this, as far forth as it is entity, it is not the province of a different science from Philosophy, that is, Ontology, to investigate; for to Physical or Natural Science may one ascribe the speculation of these, not as far forth as they are entities, but rather as far forth as they partake of motion. As to the sciences of the Dialectician, however, and the Sophist, they are sciences of the accidents, I admit, that reside in entities, but not so far forth as they are entities; nor do they speculate about entity itself, as far forth as it is entity. Wherefore, it remains that the Philosopher, or Metaphysician, should be a person qualified for speculating into the points we have just stated, in so far as they relate unto entities.

Since, however, every entity is expressed according to some one thing, and something that is common, which is multifariously predicated, and as contraries are expressed in the same manner—for they are referred to the primary contrarieties, and differential qualities of entity—and since it is possible that things of this kind should fall under the notice of one science, hence the doubt expressed in the opening parts of this work respecting first principles would be dissolved in this way. Now, the doubt I allude to is that wherein the matter of perplexity is involved in the question as to how there will be one science about entities that are many in number, and which are generically different?

IV

BUT SINCE, ALSO, THE MATHEMATICIAN EMPLOYS THINGS that are common in a manner peculiar to himself, it would be the province of the First Philosophy, that is, of Ontology, to speculate into the original principles of these things. For that when from equals equals are taken away the remainders are equal is, indeed, a dogma that is common to all quantities. Mathematical science, however, speculates about a certain portion of matter, properly so called, appropriating it to itself; as, for instance, about lines, or angles, or numbers, or something else pertaining to other quantities: not, however, as far forth as they are entities, but so far forth as each of them is that which is continuous in one, or two, or three dimensions. Philosophy, however, does not institute an inquiry respecting those particulars that are contained in a certain portion of matter, as far forth as something amongst them is an accident in each of these, but it contemplates everything of this kind respecting entity, so far forth as it is entity. And in the same manner, also, does the case stand in regard of physical science as with mathemati-

cal; for physical or natural science speculates into the accidents or first principles of entities, so far forth as they are in motion, and not so far forth as they are entities. But we have said that Ontology, or the First Science, is conversant about these in as far as the subjects of them are entities, but not so far forth as they are anything that is different. Wherefore, we may set down that both this and the science of the mathematician are parts of Wisdom or Metaphysical Science.

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